INFLATION TARGETING AND OTHER MONETARY POLICY STRATEGIES FOR LATIN AMERICA

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OUTLINE

- **The Issue is Not Fix vs. Flex**
- **Hard Pegs**
  - Advantages
  - Disadvantages
  - Lessons from Recent Experience
    Argentina, Panama
  - Bottom Line
- **Monetary Targeting** - Same: Mexico, Peru
- **Inflation Targeting** - Same: Chile, Columbia, Mexico, Peru, Brazil
- **Conclusion**

WHY ISSUE IS NOT FIX VS. FLEX

- **Issue is Whether Monetary Policy Can be Done Right**

  I.e., Can Institutions appropriately constrain discretion

  Issue is relevant Now because π is low(er)

  - Look at 3 Strategies above

  - Soft Pegs serious shortcomings discussed elsewhere

HARD PEGS
ADVANTAGES

- **Provide Nominal Anchor and Ties down π expectations**
- **Reduce Currency Risk in Domestic Interest Rates**
- **Transparent: Simple and Clear**
- **Automatic Adjustment Mechanism (Rule)**

  - Prevents Time-Inconsistency?
    M-policy and F-policy

HARD PEGS
DISADVANTAGES

- **Loss of Independent Monetary Policy**

  - Illustrated by following simple model (Svensson, 1997)

$$\pi_t = \pi_{t-1} + \alpha_1 y_{t-1} + \epsilon_t \qquad (1)$$

$$y_t = \beta_1 y_{t-1} - \beta_2 (i_{t-1} - \pi_{t-1}) + \eta_t \qquad (2)$$

Central Bank Minimizes Loss Function

$$E_t \sum \delta^{\tau - t} L_\tau \qquad (3)$$

$$L_\tau = (\pi_\tau - \pi^*)^2/2 + \lambda y_\tau^2/2 \qquad (4)$$

Yields "Taylor Rule"

$$i_t = \pi_t + b_1(\pi_t - \pi^*) + b_2 y_t \tag{5}$$

- **Loss from Hard Peg Small Only If Pegging Country is Highly Integrated with Anchor Country**

  - Then inflation and output gaps are highly correlated so anchor country Taylor rule OK for domestic country

- **Bottom Line:**
  "Good" M-policy Better than None for larger Emerging Market Countries

HARD PEGS
DISADVANTAGES

- **Loss of Lender of Last Resort?**

  - Overstated for Emerging Market Countries Currently

    Debt Structure Makes LLR Ineffective Anyway

CURRENCY BOARDS VS FULL DOLLARIZATION

CURRENCY BOARDS

- **Subject to Speculative Attacks**
- **High Interest Rates From Currency Risk?**

FULL DOLLARIZATION

- **Reduce Interest Rates to International Levels?**

  - Country Risk Problem (e.g. Confiscation of $-Assets)

    Fiscal insolvency => confiscation of $-deposits => Banking Crisis

HARD PEGS
BOTTOM LINE

- **Two Necessary Conditions:**
  1. Sound Financial System
  2. Sound Fiscal Policy

- **Hard Peg Does not ensure 2 conditions will be met**

  - Panama's Fiscal Policy No Better
    Request for 13 IMF Programs - Most in Latin America

  - Argentina's Default in 2001

  - Weakness of Argentina's Banking System almost brought down Currency Board in 1995 and helped do so in 2002

  - Soundness of Panama Banks Result of Foreign Ownership

HARD PEGS
BOTTOM LINE

- **More Output Variability**

  - Argentina!

- **Still Subject to Speculative Attacks and Bank Runs**

  - Argentina had Bank Run in 1995 and Bank Panic in 2001
  - Bank Panic in Panama in 1988-89

- **Hard to Exit**

  - Feasible if Currency Appreciating, but Political Will Weak
  - Worse for Dollarized Economy:
    New Money and M-authorities lack credibility

HARD PEGS
BOTTOM LINE

- **May be only Feasible Strategy**

  if political and economic institutions cannot support independent central bank focused on price stability

MONETARY TARGETING

- **3 Elements**

1. Use of M-aggregate to guide conduct of M-policy
2. Announcement of M-target
3. Accountability to Meet Target

MONETARY TARGETING
BOTTOM LINE

- **Has Not Been Practiced in Latin America**

    - Many central banks have first element, but not others

    - Peru is cited as having Monetary Anchor in 1990s,
      but never *Announced* Target
      Strategy is discretionary

- **Advantages Only *IF* Strong Relationship between M and PY**

  - Illustrate by adding money demand function to model above

    $$m_t - p_t = \gamma y_t - \kappa i_t + \upsilon_t \tag{6}$$

  - Presence of υ_t and uncertainty about parameters γ and κ =>
    Weak Relationship between M and PY,
    M-Targeting Deviates from Optimal Policy in (5),
    Higher Volatility of Y, π and i.

  - Relationship weak particularly when π low: E.g Mexico
    1997: MB > MB_* by 4.1%, π = 15.7% = π^*, 15%
    1998: MB < MB^* by 1.5%, π = 18% > π^* = 12%
    1999: MB > MB^* by 21%, π = 12.3% < π^* = 13%

- **Not viable, but Role for M-aggregates in M-policy**

INFLATION TARGETING

- **5 Elements**

  1. Public Announcement of Medium-Term π-target
  2. Institutional Commitment to Price Stability
  3. Information Inclusive Strategy
  4. Increased Transparency through Public Communication
  5. Increased Accountability

- **Inflation Targeting is *Much More* than 1.**
  which is customarily part of govt programs in Latin America

INFLATION TARGETING ADVANTAGES

- **Allows Focus on Domestic Concerns and Mitigate Shocks**

- **Uses All Available Information,**
  Not Dependent on Stable M-π Relationship

  - If $\lambda=0$ in (4), then i set so that

$$E_t\pi_{t+2}=\pi^{*}. \qquad \text{i.e, "Inflation Forecast Targeting"} \tag{7}$$

  - If $\lambda > 0$, then i set according to Taylor Rule in (5) and

$$E_t\pi_{t+2} - \pi^{*} = c(E_t\pi_{t+1} - \pi^{*}) \tag{8}$$

"Flexible Inflation Forecast Targeting": What is Done

INFLATION TARGETING
ADVANTAGES

- **Easily Understood and Transparent**
- **Increases Accountability**

  - Reduces Time-Inconsistency Problem

  - But Need Institutional Commitment to Price Stability

    1. Insulation of Central Bank from Politicians
    2. Central Bank Instrument Independence

  - Requires Regular Communication with Public, e.g., π-Report, Testify to Congress, etc.

INFLATION TARGETING DISADVANTAGES:

Non-Serious

- **Rigid Rule**
- **Too Much Discretion**
  - No for Both: Is "Constrained Discretion"
- **May Increase Output Fluctuations with Sole Focus on π**
  - Not way it is practiced
- **Produces Low Growth**
  - Opposite after Disinflation

INFLATION TARGETING DISADVANTAGES:

Serious

- **Weak Accountability at "High" π: π hard to control**
  - Phase in Slowly
  - Controlled Prices require coordination on timing and magnitude of changes
- **Does Not Prevent Fiscal Dominance**
  - Helps if Govt Helps Set Target

INFLATION TARGETING DISADVANTAGES:
Serious

- **Partial Dollarization with Flex Rates a Potential Problem**
  - Depreciation => \$ Debt Burden ↑ => Financial Crisis
  - "Benign Neglect" toward Exchange Rate Problematic
  - Increased Concern with Prudential Supervision

INFLATION TARGETING DISADVANTAGES:

Serious

- **See this by modifying model to allow for exchange rate effects**

$$\pi_t = \pi_{t-1} + \alpha_1 y_{t-1} + \alpha_2 e_{t-1} + \epsilon_t' \tag{1'}$$

$$y_t = \beta_1 y_{t-1} - \beta_2(i_{t-1} - \pi_{t-1}) + \beta_3(e_{t-1} - e_{t-2}) + \eta_t' \tag{2'}$$

$$e_t = \phi i_t + u_t \tag{9}$$

Optimal Policy sets i with Modified Taylor Rule

$$i_t = \pi_t + b_1(\pi_t - \pi^*) + b_2 y_t + b_3 e_t \qquad (5')$$

- If $\lambda > 0$, then i set according to Taylor Rule in (5) and

$$E_t\pi_{t+2} - \pi^* = c(E_t\pi_{t+1} - \pi^*) \qquad (8)$$

- Continue to get "Flexible Inflation Forecast Targeting"
- Same Result if Worry About Financial Stability

INFLATION TARGETING
BOTTOM LINE

- **Chilean Experience with Gradual Hardening quite Successful**

  - Inflation from above 20% in 1991 to 3% now

  - Growth very High until Target Undershot Recently

    M-policy too tight in response to 1998 shocks
    Too Much Focus on Exchange Rate,
    Eased in 1999 and Decreased Exchange Rate Focus

  - Adopt Full π-Targeting Regime Only in May 2000

INFLATION TARGETING
BOTTOM LINE

- **Brazil has all "Bells and Whistles"**

  - Shows that this can be implemented quickly - 4 months

  - Jury is not out:

    Has worked better than expected

    Fiscal policy and independence of central bank unclear

- **Mexico and Peru moving toward Inflation Targeting**

- **Colombia: *No* commitment to π Control Until Recently**
  - Inflation Targeting Has to Be Done Right

INFLATION TARGETING
BOTTOM LINE

- **Need to Recognize Undershoots as Costly as Overshoots**

    - Central Bank Should not be Viewed as "Inflation Nutter"

    - Undershoots erode support for π-Targeting and CB Independence

    - Avoiding Under or Overshoots is Complicated Exercise

INFLATION TARGETING
BOTTOM LINE

- **Sound Financial System Key to Success**
  - Rigorous Prudential Supervision Key to Success for Chile
  - Mexico ? and Peru
- **Fiscal Discipline Key to Success**
  - Problem for Brazil and Colombia
  - Multi-year π Targets with Govt help, but not enough

INFLATION TARGETING
BOTTOM LINE

- **Must pay attention to Exchange Rate**
  - Probably have gone too far
  - Run risk of moving to exchange rate anchor
  - Passthrough is Regime Dependent
    May Improve over Time
  - Rigorous Prudential Supervision Helps

INFLATION TARGETING
BOTTOM LINE

- How to Deal with Exchange Rate

  - Smooth as is done with interest rates:

    1. Should Have Exchange Rate Affect i as in Modified Taylor Rule in 9'

    2. Determined by Market over longer horizon
    3. Avoid FX Intervention

CONCLUSION

- **Issue:**
  - *Not* Fix vs Flex
  - Whether Have Institutions so Can Constrain Discretion

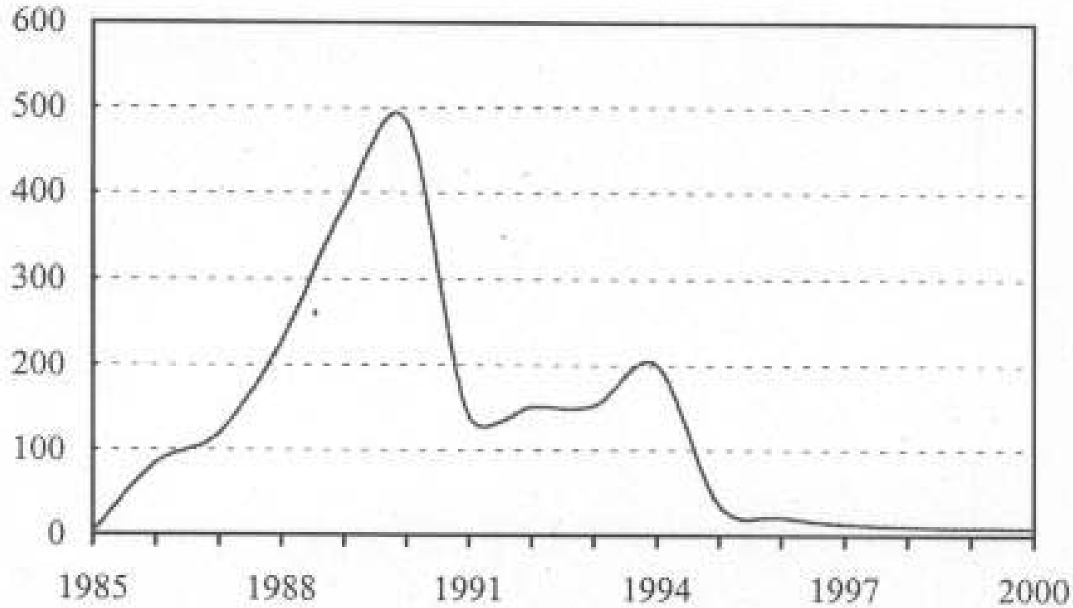
- **No Regime is Panacea**
  - Must Prevent Fiscal Dominance
  - Need Rigorous Prudential Supervision for Sound Financial System

CONCLUSION

- **Be Skeptical of "Original Sin"**
  - Recent Successes suggest EM Countries can Grow Up
  - Inflation Targeting an Option for Many, But Not All

Figure 1. Latin America: Inflation 1985-2000

Average for the Region 1/

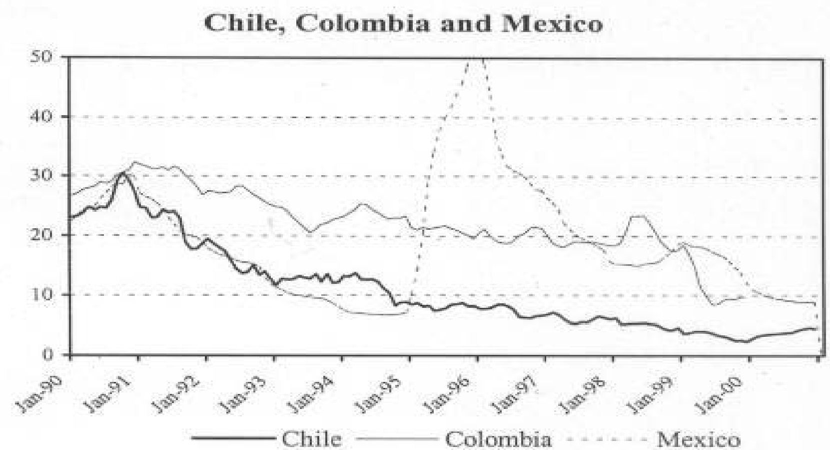


1/ 12-month percentage change in the region's average CPI.

Source: IMF, World Economic Outlook

Figure 2. Latin America: Inflation 1990-2000

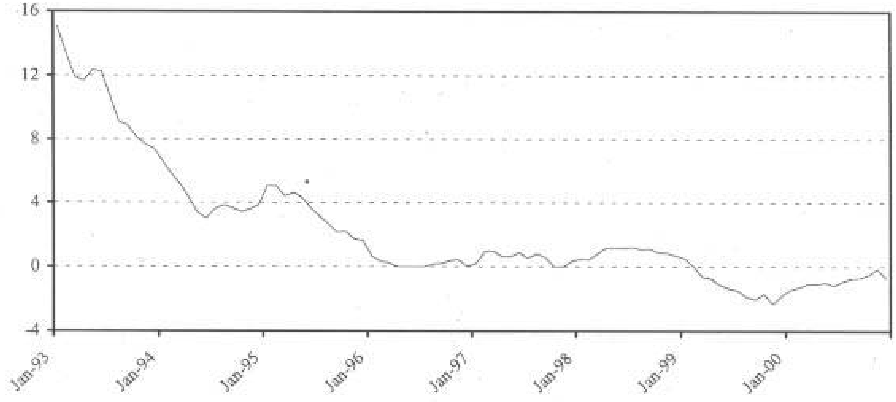
12-month percentage change in CPI



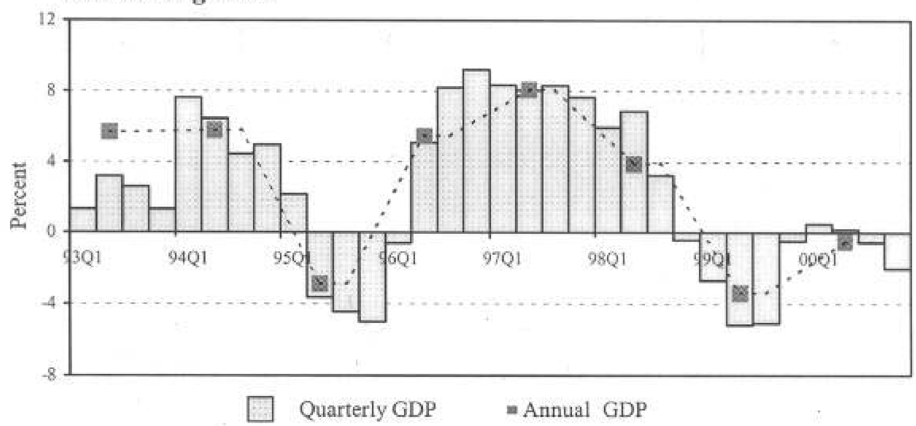
Source: IMF, International Financial Statistics.

Figure 3. Argentina: Inflation and Growth, 1993-2000

Inflation



Real GDP growth



Source: Ministry of Economy and IFS.